ELSEVIER

Journal of Crystal Growth 152 (1995) 359–362

JOURNAL OF CRYSTAL GROWTH

Author index

Bangert, U., A.J. Harvey, C. Dieker and H. Hardtdegen, Nucleation of wavy growth modes in quantum well stacks of III–V compound alloys 152 (1995) 115
Bender, G., S. Meisen, N. Herres, C. Wild and P. Koidl, Deformation-induced ferroelectric domain pinning in chromium doped $LiNbO_3$ 152 (1995) 307
Bhat, H.L., see Dutta 152 (1995) 14
Bridenbaugh, P.M., see Laudise 152 (1995) 241
Burrows, P.E., see Fenter 152 (1995) 65

Candau, J.S., see Skouri 152 (1995) 209
Chandrasekhar, D., D.J. Smith, S. Strite, M.E. Lin and H. Morkoç, Characterization of Group III-nitride semiconductors by high-resolution electron microscopy 152 (1995) 135
Chang, G.-H., see Jiang 152 (1995) 127
Chang, L.-B., see Jiang 152 (1995) 127
Chen, Guang, see Tu 152 (1995) 235
Chen, S.D., L. Lin, X.Z. He, M.J. Ying and R.Q. Wu, High quality HgCdTe epilayers grown on (211)B GaAs by molecular beam epitaxy 152 (1995) 261
Chernov, A.A., see Lundager Madsen 152 (1995) 191
Christensson, F., see Lundager Madsen 152 (1995) 191
Cui, S.F., Y.T. Wang, Y. Zhuang, M. Li and Z.H. Mai, In-plane X-ray scattering of epitaxial structures 152 (1995) 354
Curzon, A.E., see Hamed 152 (1995) 280

Deng Jiangdong, Li Zengfa, Zhang Guangyin and Geng Yanxiang, Detection of surface defects of Si epitaxial wafers by the magic-mirror approach 152 (1995) 274
Denhoff, M., see Hamed 152 (1995) 280
Derby, J.J., see Yeckel 152 (1995) 51
Derby, J.J., see Xiao 152 (1995) 169
Dibrell, F.S. and P.J. Phillips, A morphological study of the polyethylene-acridine phase diagram 152 (1995) 321
Dieker, C., see Bangert 152 (1995) 115
Dimoulas, A., see Shen 152 (1995) 28
Dutta, P.S., K.S.R. Koteswara Rao, H.L. Bhat, K. Gopalakrishna Naik and V. Kumar , Surface morphology, electrical and optical properties of gallium antimonide layers grown by liquid phase epitaxy 152 (1995) 14

Eckler, K., see Li 152 (1995) 101
Eisenberger, P., see Fenter 152 (1995) 65

Fenter, P., P.E. Burrows, P. Eisenberger and S.R. Forrest, Layer-by-layer quasi-epitaxial growth of a crystalline organic thin film 152 (1995) 65
Fleming, R.M., see Laudise 152 (1995) 241
Forrest, S.R., see Fenter 152 (1995) 65
Fukuda, T., see Kawaguchi 152 (1995) 87
Funemizu, M., see Nishibe 152 (1995) 351

García, M.V., see González-Tejera 152 (1995) 330
Gebhardt, W., see Wolf 152 (1995) 34
Gebhardt, W., see Rosenauer 152 (1995) 42
Geng Yanxiang, see Deng Jiangdong 152 (1995) 274
Giegé, R., see Skouri 152 (1995) 209
Glass, R.C., see Nikitina 152 (1995) 292
Göbel, E.O., see Lutgen 152 (1995) 1
González-Tejera, M.J., S. López-Andrés, M.V. García, M.I. Redondo and J.A. Rodríguez Cheda, Single crystal growth of lead (II) *n*-octa-, *n*-nona- and *n*-decanoate 152 (1995) 330
Gopalakrishna Naik, K., see Dutta 152 (1995) 14
Guseva, N.B., see Nikitina 152 (1995) 292
Gygax, S., see Hamed 152 (1995) 280

Hamed, F., S. Gygax, A.E. Curzon and M. Denhoff, Growth and characterization of BiSrCaCuO whiskers 152 (1995) 280
Han, Q. and J.D. Hunt, Particle pushing: critical flow rate required to put particles into motion 152 (1995) 221
Hardtdegen, H., see Bangert 152 (1995) 115
Harvey, A.J., see Bangert 152 (1995) 115
Hasegawa, F., see Tsuchiya 152 (1995) 21
Hasegawa, M., see Jang 152 (1995) 158
He, X.Z., see Chen 152 (1995) 261
Herlach, D.M., see Li 152 (1995) 101
Herres, N., see Bender 152 (1995) 307

Hong, Xinguo and Kunquan Lu, Improvement of the torsion pendulum in molten viscosity measurements 152 (1995) 334
Hosaka, M., T. Miyata and I. Sunagawa, Growth and morphology of quartz crystals synthesized above the transition temperature 152 (1995) 300
Hu, H. and P.K. Nair, Chemical deposition of photosensitive CdS thin films on polyester foils 152 (1995) 150
Huang, D.M., see Wang 152 (1995) 286
Hunt, J.D., see Han 152 (1995) 221

Imaeda, M., see Kawaguchi 152 (1995) 87
Imai, K., see Jang 152 (1995) 158
Ishitani, Y., see Minagawa 152 (1995) 251
Izunome, K., see Kawanishi 152 (1995) 266

Jang, W.-J., K. Imai, M. Hasegawa and H. Takei, Growth and structure of $La_2NiO_{4+\delta}$ ($0.19 \geqslant \delta \geqslant 0.12$) single crystals 152 (1995) 158
Janzén, E., see Nikitina 152 (1995) 292
Jiang, G.-C., L.-B. Chang, G.-H. Chang and L.S. Lu, Photoluminescent properties of undoped and Pr-doped GaAs epilayers 152 (1995) 127
Jilka, S., see Wolf 152 (1995) 34

Kaczmarek, F., M.B. Kosmina, A.B. Levin, B.P. Nazarenko and C.N. Kolpakov, Growth of erbium pentaphosphate monocrystals 152 (1995) 238
Katz, H.E., see Laudise 152 (1995) 241
Kawaguchi, T., D.-H. Yoon, M. Minakata, Y. Okada, M. Imaeda and T. Fukuda, Growth of high crystalline quality $LiNbO_3$ thin films by a new liquid phase epitaxial technique from a solid–liquid coexisting melt 152 (1995) 87
Kawanaka, S., see Minagawa 152 (1995) 251
Kawanishi, S., S. Togawa, K. Izunome, K. Terashima and S. Kimura, Melt quenching technique for direct observation of oxygen transport in the Czochralski-grown Si process 152 (1995) 266
Kimura, S., see Kawanishi 152 (1995) 266
Kitano, M., T. Okabe and M. Shiojiri, Growth of electrocrystallized ZnO particles by reaction of vacuum-deposited Zn films with distilled water 152 (1995) 73
Kjebon, O., see Lourdudoss 152 (1995) 105
Kliya, M.O., see Lundager Madsen 152 (1995) 191
Koidl, P., see Bender 152 (1995) 307
Kolpakov, C.N., see Kaczmarek 152 (1995) 238
Kosmina, M.B., see Kaczmarek 152 (1995) 238
Koteswara Rao, K.S.R., see Dutta 152 (1995) 14
Kou, S., see Lin 152 (1995) 256
Kramer, H.J.M., see Ó Meadhra 152 (1995) 314
Kubota, N. and J.W. Mullin, A kinetic model for crystal growth from aqueous solution in the presence of impurity 152 (1995) 203
Kumar, V., see Dutta 152 (1995) 14
Kurihara, M., see Tsuchiya 152 (1995) 21
Kurosawa, K., see Ohmukai 152 (1995) 247

Landgren, G., see Lourdudoss 152 (1995) 105
Laudise, R.A., P.M. Bridenbaugh, T. Siegrist, R.M. Fleming, H.E. Katz and A.J. Lovinger, Growth of α-hexathienyl by a micro melt technique 152 (1995) 241
Lee, Dong-Jin, see Lee 152 (1995) 341
Lee, Jinho, Dong-Jin Lee and Jung Hyun Lee, On the mechanism of oscillation in a stimulated floating zone 152 (1995) 341
Lee, Jung Hyun, see Lee 152 (1995) 341
Levin, A.B., see Kaczmarek 152 (1995) 238
Li, D.L., T. Volkmann, K. Eckler and D.M. Herlach, Crystal growth in undercooled germanium 152 (1995) 101
Li, Hua and Nai-Ben Ming, Growth mechanism and kinetics on re-entrant corner and twin lamellae in an fcc crystal 152 (1995) 228
Li, M., see Cui 152 (1995) 354
Li, Z.Y., see Shen 152 (1995) 28
Lin, L., see Chen 152 (1995) 261
Lin, M.E., see Chandrasekhar 152 (1995) 135
Lin, M.H. and S. Kou, Segregation control in Czochralski pulling of InSb single crystals 152 (1995) 256
Li Zengfa, see Deng Jiangdong 152 (1995) 274
López-Andrés, S., see González-Tejera 152 (1995) 330
Lorber, B., see Skouri 152 (1995) 209
Lourdudoss, S., E. Rodríguez Messmer, O. Kjebon and G. Landgren, Temporally resolved regrowth of InP 152 (1995) 105
Lovinger, A.J., see Laudise 152 (1995) 241
Lu, Kunquan, see Hong 152 (1995) 334
Lu, L.S., see Jiang 152 (1995) 127
Lundager Madsen, H.E., Influence of magnetic field on the precipitation of some inorganic salts 152 (1995) 94
Lundager Madsen, H.E., F. Christensson, L.E. Polyak, E.I. Suvorova, M.O. Kliya and A.A. Chernov, Calcium phosphate crystallization under terrestrial and microgravity conditions 152 (1995) 191
Luo, Zundu, see Tu 152 (1995) 235
Lutgen, S., T. Marschner, W. Stolz, E.O. Göbel and L. Tapfer, Atomic incorporation efficiencies for strained (GaIn)As/Ga(PAs) superlattice structures grown by metalorganic vapour phase epitaxy 152 (1995) 1

Mai, Z.H., see Cui 152 (1995) 354
Mal'tsev, A.A., see Nikitina 152 (1995) 292
Marschner, T., see Lutgen 152 (1995) 1

Meisen, S., see Bender 152 (1995) 307
Minagawa, S., Y. Ishitani, T. Tanaka and S. Kawanaka, Heavy doping of silicon into $Ga_{0.5}In_{0.5}P$ at low temperatures in organometallic vapor phase epitaxy 152 (1995) 251
Minakata, M., see Kawaguchi 152 (1995) 87
Ming, Nai-Ben, see Li 152 (1995) 228
Miyata, T., see Hosaka 152 (1995) 300
Morkoç, H., see Chandrasekhar 152 (1995) 135
Mullin, J.W., see Kubota 152 (1995) 203
Munch, J.-P., see Skouri 152 (1995) 209

Nair, P.K., see Hu 152 (1995) 150
Naito, H., see Ohmukai 152 (1995) 247
Naumov, A., see Wolf 152 (1995) 34
Nazarenko, B.P., see Kaczmarek 152 (1995) 238
Nikitina, I.P., R.C. Glass, E. Janzén, N.B. Guseva and A.A. Mal'tsev, Structural analysis of 4H-SiC layers grown on 6H-SiC and 15R-SiC substrates 152 (1995) 292
Nishibe, T. and M. Funemizu, Possibility of realizing new structures with inner fine electrodes by metalorganic chemical vapor deposition regrowth on Al/SiO_2 wires 152 (1995) 351
Nover, G., see Singh 152 (1995) 143

Ó Meadhra, R.S., H.J.M. Kramer and G.M. van Rosmalen, Size dependent growth behaviour related to the mosaic spread in ammonium sulphate crystals 152 (1995) 314
Ohmukai, M., H. Naito, M. Okuda and K. Kurosawa, Origin of the inferiority of the crystalline quality in $InAs_xP_{1-x}$ bulk crystals grown by a solution growth method 152 (1995) 247
Okabe, T., see Kitano 152 (1995) 73
Okada, Y., see Kawaguchi 152 (1995) 87
Okuda, M., see Ohmukai 152 (1995) 247

Phillips, P.J., see Dibrell 152 (1995) 321
Polak, W. and K. Sangwal, Modelling the formation of solute clusters in aqueous solutions of ionic salts 152 (1995) 182
Polyak, L.E., see Lundager Madsen 152 (1995) 191

Qureshi, A.U.H., see Wang 152 (1995) 286

Redondo, M.I., see González-Tejera 152 (1995) 330
Reisinger, T., see Wolf 152 (1995) 34
Reisinger, T., see Rosenauer 152 (1995) 42
Rodríguez Cheda, J.A., see González-Tejera 152 (1995) 330
Rodríguez Messmer, E., see Lourdudoss 152 (1995) 105
Rosenauer, A., T. Reisinger, E. Steinkirchner, J. Zweck and W. Gebhardt, High resolution transmission electron microscopy determination of Cd diffusion in CdSe/ZnSe single quantum well structures 152 (1995) 42

Sahin, H., see Wolf 152 (1995) 34
Salinger, A.G., see Yeckel 152 (1995) 51
Sangwal, K., see Polak 152 (1995) 182
Sasaki, M., see Yoshida 152 (1995) 347
Shen, S.C., see Shen 152 (1995) 28
Shen, W.Z., W.G. Tang, Z.Y. Li, S.C. Shen and A. Dimoulas, Photoluminescence studies of modulation-doped $In_{0.60}Ga_{0.40}As/In_{0.52}Al_{0.48}As$ strained multiple quantum wells 152 (1995) 28
Shen, X.L., see Wang 152 (1995) 286
Shiojiri, M., see Kitano 152 (1995) 73
Siegrist, T., see Laudise 152 (1995) 241
Singh, B.P., G. Nover and G. Will, High pressure phase transformations of cubic boron nitride from amorphous boron nitride using magnesium boron nitride as the catalyst 152 (1995) 143
Skouri, M., B. Lorber, R. Giegé, J.-P. Munch and J.S. Candau, Effect of macromolecular impurities on lysozyme solubility and crystallizability: dynamic light scattering, phase diagram, and crystal growth studies 152 (1995) 209
Smith, D.J., see Chandrasekhar 152 (1995) 135
Stanzl, H., see Wolf 152 (1995) 34
Steinkirchner, E., see Rosenauer 152 (1995) 42
Stolz, W., see Lutgen 152 (1995) 1
Strite, S., see Chandrasekhar 152 (1995) 135
Sunagawa, I., see Hosaka 152 (1995) 300
Suvorova, E.I., see Lundager Madsen 152 (1995) 191

Takei, H., see Jang 152 (1995) 158
Takeuchi, A., see Tsuchiya 152 (1995) 21
Tanaka, T., see Minagawa 152 (1995) 251
Tang, W.G., see Shen 152 (1995) 28
Tapfer, L., see Lutgen 152 (1995) 1
Terashima, K., see Kawanishi 152 (1995) 266
Tiller, W.A., see Uda 152 (1995) 79
Togawa, S., see Kawanishi 152 (1995) 266
Tsuchiya, H., A. Takeuchi, M. Kurihara and F. Hasegawa, Metalorganic molecular beam epitaxy of cubic GaN on (100)GaAs substrates using triethylgallium and monomethylhydrazine 152 (1995) 21
Tu, Chaoyang, Zundu Luo, Guang Chen and Tingjie Zhao, Crystal growth of $KGd(WO_4)_2:Nd^{3+}$ 152 (1995) 235

Uda, S. and W.A. Tiller, Microbubble formation during crystallizaton of $LiNbO_3$ melts 152 (1995) 79

Van Rosmalen, G.M., see Ó Meadhra 152 (1995) 314

Volkmann, T., see Li 152 (1995) 101

Wang, J., C.S. Zhu, A.U.H. Qureshi, D.M. Huang, X. Wang and X.L. Shen, Structural characteristics of diluted magnetic semiconductor $Zn_{1-x}Mn_xSe$ films grown by hot wall epitaxy on GaAs(100) substrates 152 (1995) 286
Wang, X., see Wang 152 (1995) 286
Wang, Y.T., see Cui 152 (1995) 354
Wild, C., see Bender 152 (1995) 307
Will, G., see Singh 152 (1995) 143
Wolf, K., S. Jilka, H. Sahin, H. Stanzl, T. Reisinger, A. Naumov and W. Gebhardt, Relaxation process and luminescence of lattice defects in epitaxially grown ZnSe/GaAs layers 152 (1995) 34
Wu, R.Q., see Chen 152 (1995) 261

Xiao, Q. and J.J. Derby, Three-dimensional melt flows in Czochralski oxide growth: high-resolution, massively parallel, finite element computations 152 (1995) 169

Yeckel, A., A.G. Salinger and J.J. Derby, Theoretical analysis and design considerations for float-zone refinement of electronic grade silicon sheets 152 (1995) 51
Ying, M.J., see Chen 152 (1995) 261
Yoon, D.-H., see Kawaguchi 152 (1995) 87
Yoshida, S. and M. Sasaki, In-situ AlAs selective-area growth by metalorganic molecular beam epitaxy using dimethylaluminumhydride and tris-dimethylaminoarsine 152 (1995) 347

Zhang Guangyin, see Deng Jiangdong 152 (1995) 274
Zhao, Tingjie, see Tu 152 (1995) 235
Zhu, C.S., see Wang 152 (1995) 286
Zhuang, Y., see Cui 152 (1995) 354
Zweck, J., see Rosenauer 152 (1995) 42

ELSEVIER

Journal of Crystal Growth 152 (1995) 363–365

JOURNAL OF CRYSTAL GROWTH

Subject index

Ammonium
– sulphate 314
Aluminum
– arsenide 347
– nitride 135
Apparatus
– for critical flow rate measurements 221
– for melt growth
– – by Czochralski method
– – – of indium antimonide with floating crucible 251
– for quenching
– – by double layer Czochralski process 266
– for strain analysis 314
– for viscosity measurements
– – by torsion pendulum 334

Boron
– nitride 143

Cadmium
– sulphide 150
– zinc selenide 42
Calcite 94
Calcium
– carbonate 94
– phosphate 191
Cellular growth
– of shaped crystals 79
– of solids 221
Characterization
– by high resolution transmission electron microscopy 135
– by magic mirror technique
– – of surface defects in silicon 274
Computer simulation
– of convection 169
– of diffusion 191
– of growth kinetics in aqueous solutions 203
– of nucleation 228
Constitutional supercooling
– of shaped crystals 79
Convection 51, 169, 221, 266

Dendritic growth
– of germanium 101
– of solids 221
– of zinc bi-hydroxide 73
Device characterization
– electronic materials 34, 354
– heterojunction 34
– quantum wells 28, 42, 115
Diffusional control
– of cadmium in zinc selenide 42
– of dopants in indium antimonide 256
Dopants
– praseodymium in gallium arsenide 127

Electronic materials, see Device characterization
Epitaxy, see Thin film growth
Etching
– chemical 266, 307
Eutectic growth
– of polyethylene-acridine 321

Gallium
– aluminum arsenide 1
– antimonide 14
– arsenide 1, 115, 127
– indium arsenide 1, 115
– indium phosphide 251
– nitride 21, 135
– phosphide arsenide 1
Germanium 101

Heat flow control, of
– silicon sheets 51
Heterojunction, see Device characterization
Hydrodynamics, see Convection

Indium
– aluminum arsenide 28
– antimonide 251, 256
– arsenide phosphide 247
– gallium arsenide 28, 351
– gallium arsenide phosphide 115
– gallium phosphide 251
– nitride 135
– phosphide 105, 115, 351

Kinetics
– of growth 1, 21, 101, 115, 203, 209, 314, 351
– of interface control 1, 79, 266
– of nucleation 228

Lanthanum
– nickel oxide 158
Lasers, crystals for
– erbium pentaphosphate 238
Lead
– (II) n-decanoate 330
– (II) n-nonanoate 330
– (II) n-octanoate 330
Lithium
– niobate 79, 87, 307
Lysozyme 209

Melt growth technique
– by Czochralski method
– – of chromium doped lithium niobate 307
– – of indium antimonide 251
– – of oxides 169
– – of silicon 266
– – theory of heat flow 169
– by electromagnetic levitation
– – of germanium 101
– by floating zone method 341
– – of lanthanum nickel oxide 158
– – of silicon sheets 51
– by uniaxial solidification
– – of alpha-hexathienyl 241
Mercury
– cadmium telluride 261
Microgravity, growth under
– of calcium phosphate 191
– simulated floating zone 341
Morphological stability
– of germanium 101
– of interfaces 351
– of polyethylene acridine 321
– of quartz 300
– of zinc oxide 73

Nucleation 115
– of fcc crystals 228
– of ionic salts 182
– of lithium niobate 87
– of lithium niobate bubbles 79
– of zinc oxide 73
Numbers
– Grashof 169
– Marangoni 51, 341
– Peclet 169
– Prandtl 169, 341
– Rayleigh 169, 341

Phase diagram
– of boron nitride 143
– of lysozyme 209
– of polyethylene-acridine 321
Potassium
– chloride 182
– gadolinium tungstate 235
Precursor
– for aluminum arsenide 347
– for gallium nitride 21

Quantum wells, see Device characterization
Quartz 300

Silicon 51, 115, 266, 274
– carbide 292
– germanium 115
Solid growth technique
– by polymorphic transformation
– – of cubic boron nitride 143
Solution growth technique
– by electrocrystalization
– – of zinc oxide 73
– by flux method
– – of ammonium sulphate 314
– – of neodymium doped potassium gadolinium tungstate 235
– by gel method
– – of lead (II) n-octanoate, n-nonanoate, n-decanoate 330
– by hydrothermal growth
– – of quartz 300
– by low temperature method
– – of aqueous mixes in presence of impurities 203
– – of cadmium sulphide 150
– – of indium arsenide phosphide 247
– by low temperature method with magnetic field
– – of apatite 94
– – of brushite 94
– – of calcite 94
– – of calcium carbonate 94
– – of calcium oxalate 94
– – of calcium phosphate 94
– – of calcium sulphate 94
– – of cobalt phosphate 94
– – of gypsum 94
– – of hopeite 94
– – of iron phosphate 94
– – of magnesium phosphate 94
– – of manganese carbonate 94
– – of struvite 94
– – of vivianite 94
– – of whewellite 94
– – of zinc phosphate 94
– by vapor diffusion
– – of lysozyme 209
Superconductivity materials, high T_c
– bulk
– – of BSCCO whiskers 280
Superlattices, multilayers
– of III–V compounds 1, 28, 354
Surface energy, determination
– of potassium chloride 182
Surface morphology
– of gallium antimonide 14
– of lithium niobate 87

Surface structure
– of epitaxial silicon 274

Thin film growth, epitaxy
– by hot wall epitaxy
– – of zinc manganese selenide 286
– by liquid phase epitaxy
– – of gallium antimonide 14
– – of gallium arsenide 127
– – of lithium niobate 87
– by metalorganic molecular beam epitaxy
– – of gallium nitride 21
– by molecular beam epitaxy
– – of 3,4,9,10 perylenetetracarboxylic dianhydride 65
– – of aluminum arsenide 347
– – of aluminum nitride 135
– – of cadmium zinc selenide 42
– – of gallium nitride 135
– – of indium aluminum arsenide 28
– – of indium gallium arsenide 28
– – of indium nitride 135
– – of mercury cadmium telluride 261
– – of zinc selenide 34
– – theory of cadmium diffusion in zinc selenide 42
– by vapor phase epitaxy
– – through metalorganic chemical vapor deposition
– – – of gallium arsenide 1, 115
– – – of gallium indium arsenide 1, 115
– – – of gallium indium phosphide 251
– – – of gallium phosphide arsenide 1
– – – of indium gallium arsenide 351
– – – of indium gallium arsenide phosphide 115
– – – of indium phosphide 105, 115, 351
– – – of silicon germanium 115
– – – of zinc selenide 34

Vapor growth technique
– by chemical transport
– – of 4H-silicon carbide 292

Whisker growth
– of BSCCO 280
– of zinc oxide 73

Zinc
– manganese selenide 286
– oxide 73
– selenide 34, 42